



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,806	07/17/2003	David Randall Blea	TUC920030018US1	1456
46917	7590	01/05/2007	EXAMINER	
KONRAD RAYNES & VICTOR, LLP.			ROSE, HELENE ROBERTA	
ATTN: IBM37			ART UNIT	PAPER NUMBER
315 SOUTH BEVERLY DRIVE, SUITE 210			2163	
BEVERLY HILLS, CA 90212				
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/621,806	BLEA ET AL.
	Examiner Helene Rose	Art Unit 2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 December 2006.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 July 2003 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

**Detailed Action**

1. This is a Response After Non-Final Action entered on 12/12/2006, wherein the Examiner withdrew the final rejection that was mailed on 7/5/2006, in which claims 1-20 were rejected under 35 U.S.C. 103(a) as being obvious over SEGEV et al. (U.S. Patent No. 6,848,021) in view of GOIFFON et al. (U.S. Patent No. 6,226,792), wherein SEGEV was disqualified, due to a response filed on April 11, 2006, wherein Applicant attached a Declaration signed by Dale M. Crockatt that declares that U.S. Patent Application No. 10/621,806 and U.S. Patent No. 6,848,021 were, at the time the invention of U.S. Patent Application No. 10/621,806 was made, owned by International Business Machines Corporation.

Therefore, another NON\_FINAL ACTION was issued and mailed on 9/12/2006.

2. Applicant's arguments entered on 12/12/2006, regarding Claims 1-20, have been fully considered but they are not persuasive.

**Claim Rejections-35 U.S.C 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being obvious over LINDE et al. (US Patent No. 6,799,258) in view of GOIFFON et al (US Patent No. 6,226,792).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to

the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Claims 1, 8, and 15:

Regarding claims 1, 8, and 15, LINDE teaches a method for creating a copy services solution, comprising:

receiving a document describing the copy services solution wherein the copy services solution describes a chain of base copy types (column 9, lines 23-25 and 25-28, wherein the storage domain server receives a read or write request from, e.g., an application server, and wherein a method of performing a write to the source volume, a method of performing a write to the point-in-time volume and column 9, lines 62-67, wherein Point-in-time volumes are general-purpose volumes from which data can be read, wherein a method of reading from a point-in-time volume begins at step 760, and the data chunk associated with the data block to be read is determined, wherein a migration table 610 is used to determine whether the data chunk to be read has been copied to the related point-in-time volume and if the data chunk has been copied, control jumps to step 768, otherwise control proceeds to step 766, LINDE);

LINDE discloses all the limitations above. However, LINDE does not disclose wherein an event and an action to be performed for that event, wherein the document is not directly executable,

On the other hand, GOIFFON discloses an event and an action to be performed for that event and (column 1, lines 32-40, wherein a design is broken into code components, wherein each component is tailored to perform a discrete function on any data to which it is passed, which is interpreted to be "an event and an action", and if each component is designed to accomplish the function in a generalized versus a task specific way the component may potentially be reused to solve a different task; column 8,

lines 5-11, wherein new versions of tools may be installed over time, and when this occurs, updated versions of the associated elements are also created and interrelated, and wherein interrelated is interpreted to be "those actions that are part of a larger action and depend on the larger action for their justification", and the relationship between a version of a tool and elements created by the tool are also recorded in the Element Inventory; which is interpreted and equivalent to "an event and an action to be performed for that event", wherein this is interpreted to be "actions to take if certain events should occur", GOIFFON), wherein the document is not directly executable (column 18, lines 51-56, wherein if two versions of the code entity exist, these two versions may or may not have relationships with different versions of a different element, wherein "versions" is interpreted to be a variant of some element usually a document or a product; depending on the interrelationships existing between the code entities within the system and wherein for example, an updated version of a program will be associated with a later element version which may or may not have the same relationships as the earlier element version, and if the updated program version must reference an update version of a table, the table will further be described by meta-data in a later version of an associated element and relationship will be created between these two later versions of elements, which is equivalent to "converting the document to executable code", wherein the claim document is not directly executable, but is converted to code that is executed" as stated within applicant remarks on page 8 and column 13, lines 52-57, wherein export element types, wherein export is defined to be to format data in such a way that it can be used by another application, this service reads element types from the Element Inventory Schema (EIS) and writes them into a file in a predetermined format, wherein the format is XML, and this service is called by scripts which executes on the Script Server, wherein the script server is interpreted to be a set of instructions that performs a specific function on computer to delivers information, which is equivalent to "wherein the document is not directly executable", GOIFFON).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to modify the invention of LINDE by the teaching of GOIFFON et al to associate copy services as provided by Linde (see abstract, wherein a point-in-time copy service is provided) with actions to be performed (column 8, lines 5-11).

A skilled artisan would have been motivated to do so by implementing and establishing a method to provide a more useful technique for backup data recovery.

wherein the base copy types include a continuous base copy type that refers to a base copy services solutions in which copying is constantly performed and a point-in-time base copy type that refers to a base copy services solutions in which a copy of data is made at a given point in time (column 5, lines 28-30, wherein application server 1 can concurrently read and write data blocks on source volume while backup server performs a file level backup, wherein concurrently is interpreted to be occurring at the same time or overlapping, and equivalent to "copying is constantly performed"; and column 5, lines 39-56, wherein the concurrent availability of these volumes allows for time-shifting, wherein time-shifting is the ability to shift the processing of data to a more optimal time, wherein for example, it may be desirable to backup source volume each Monday at 17:00 hours, wherein the point-in-time volume 2 could be created or enabled at 17:00 hours on Monday, wherein the backup server can then perform the backup process on point-in-time volume 2 at some later time, yet the backed up data is as of Monday at 17:00 hours regardless of when the actual backup process is completed, wherein the point-in-time process preserves the state of source volume at the particular point-in-time the relationship was enabled, the application server 1 can continue to read and write source volume 315 after Monday at 17:00 hours, which is also interpreted to be continuous, and wherein the backup server uses a snapshot of source volume, wherein snapshot is interpreted to be "a copy", and wherein the above explanation is equivalent to "copying is constantly performed and wherein a point in time base copy type that refers to a base copy services solution in which a copy of data is made at given time", LINDE).

converting the document to executable code (column 8, lines 16-21, wherein converts business applications into code, GOIFFON); and

executing the code to perform one or more base copy services solutions described with the chain of base copy types in the document (column 12, lines 65-67, wherein to perform read/write operations on the source volume or point in time volume, LINDE).

Claims 2,9, and 16:

Regarding claims 2, 9, and 16, the combination of LINDE in view of GOIFFON teaches wherein the document comprises an Extensible Markup Language document (column 7, lines 31-34, wherein file structures are a format into which a file is arranged by computer, wherein export/import exchanges are accompanied using self-defining intermediate file structures of the type utilized by various export/import standards such as extensible markup language. GOIFFON).

Claims 3,10, and 17:

Regarding claims 3, 10, and 17, the combination of LINDE in view of GOIFFON teaches wherein the document describes a session comprising one or more sequences (column 7, lines 12-17 and column 65-67, wherein one or more elements are created that define each of the tools, GOIFFON) and wherein each sequence represents a base copy type (column 19, lines 11-19, GOIFFON).

Claims 4, 11, and 18:

Regarding claims 4,11, and 18, the combination of LINDE in view of GOIFFON teaches wherein at least one sequence includes characteristics for the base copy type represented by that sequence (column 22, lines 42-44, GOIFFON).

Claims 5, 12, and 19:

Regarding claims 5,12, and 19, the combination of LINDE in view of GOIFFON teaches wherein at least one sequence includes an event (column 29, lines 18-31, wherein a match is found and its and duplicate of the first word, GOIFFON) and **one or more actions** to be performed for that event (column 29, lines 32-50, wherein a action is performed by user and the process is repeated for each additional hierarchy, GOIFFON).

Claims 6 and 13:

Regarding claims 6 and 13, the combination of LINDE in view of GOIFFON teaches wherein converting the document to executable code further comprises:

deserializing the Extensible Markup Language document to form one or more classes (column 13, lines 52-57, GOIFFON), wherein each class includes data describing zero or more characteristics of a

base copy type (column 22, lines 42-44, GOIFFON) and including zero or more methods representing actions to be performed for particular events (column 17, lines 47-50, GOIFFON).

Claims 7,14, and 20:

Regarding claims 7, 14, and 20, the combination of LINDE in view of GOIFFON teaches wherein converting the document to executable code (column 8, lines 19-22, GOIFFON) further comprises:

identifying a base copy services solution to implement for a base copy type described in the document (column 19, lines 1-6, GOIFFON).

**Response to Applicant Arguments**

5. Applicant submits that there is no teaching or motivation to combine the LINDE and GOIFFON et al. patents as stated on page 7 out of 9, in remarks.

In response to applicant's argument that there is no suggestion to combine the references of the LINDE AND GOIFFON et al patents, the combination does not result in Applicants invention, the arguments have been fully considered but are not found to be persuasive, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, GOIFFON et al teaches a "an event and an action to be performed for that event" (column 1, lines 32-40, wherein a design is broken into code components, wherein each component is tailored to perform a discrete function on any data to which it is passed, which is interpreted to be "an event and an action", and if each component is designed to accomplish the function in a generalized versus a task specific way the component may potentially be reused to solve a different task; column 8, lines 5-11, wherein new versions of tools may be installed over time, and when this occurs,

updated versions of the associated elements are also created and interrelated, and wherein interrelated is interpreted to be "those actions that are part of a larger action and depend on the larger action for their justification"; and the relationship between a version of a tool and elements created by the tool are also recorded in the Element Inventory; which is interpreted and equivalent to "an event and an action to be performed for that event", wherein this is interpreted to be "actions to take if certain events should occur", and GOIFFEN also teaches:

**"wherein the document is not directly executable"** (column 18, lines 51-56, wherein if two versions of the code entity exist, these two versions may or may not have relationships with different versions of a different element, wherein "versions" is interpreted to be a variant of some element usually a document or a product; depending on the interrelationships existing between the code entities within the system and wherein for example, an updated version of a program will be associated with a later element version which may or may not have the same relationships as the earlier element version, and if the updated program version must reference an update version of a table, the table will further be described by meta-data in a later version of an associated element and relationship will be created between these two later versions of elements, which is equivalent to "converting the document to executable code", wherein the claim document is not directly executable, but is converted to code that is executed" as stated within applicant remarks on page 8 and column 13, lines 52-57, wherein export element types, wherein export is defined to be to format data in such a way that it can be used by another application, this service reads element types from the Element Inventory Schema (EIS) and writes them into a file in a predetermined format, wherein the format is XML, and this service is called by scripts which executes on the Script Server, wherein the script server is interpreted to be a set of instructions that performs a specific function on computer to delivers information, which is equivalent to "wherein the document is not directly executable").

Therefore, a person having ordinary skill in the art at the time the invention was made would be motivated to modify the invention of Linde by the teaching of Goiffon et al to associate copy services as

provided by Linde (see abstract, wherein a point-in-time copy service is provided) with actions to be performed (column 8, lines 5-11).

It is well known in the art that expediting the performance of a copy service system provides significant motivation for a person with ordinary skill in the art to combine the above-mentioned references in order to satisfy the claim(s) of the present invention.

6. Applicant respectfully submit that the "LINDE patent does not teach or suggest receiving a document describing the copy services solution, wherein the copy services solution describes a chain of base copy types, wherein the base copy types include continuous base copy type that refers to a base copy services solution in which copying is constantly performed and a point in time base copy type that refers to a base copy services solution in which a copy of data is made at a given point in time".

Applicant argues an amended claim language, which was not presently defined within the original office action, therefore in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a chain of and wherein the base copy types include continuous base copy type that refers to a base copy services solution in which copying is constantly performed and a point in time base copy type that refers to a base copy services solution in which a copy of data is made at a given point in time) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

7. Applicant argues that prior art fails to teach, "converting the document to executable code".

Examiner is not persuaded. Referring to GOIFFON, column 18, lines 51-56, wherein if two versions of the code entity exist, these two versions may or may not have relationships with different versions of a different element, wherein "versions" is interpreted to be a variant of some element usually a

document or a product; depending on the interrelationships existing between the code entities within the system and wherein for example, an updated version of a program will be associated with a later element version which may or may not have the same relationships as the earlier element version, and if the updated program version must reference an update version of a table, the table will further be described by meta-data in a later version of an associated element and relationship will be created between these two later versions of elements, which is equivalent to "converting the document to executable code", wherein the claim document is not directly executable, but is converted to code that is executed" as stated within applicant remarks on page 8.

8. Applicant argues that prior art fails to teach, "executing the code to perform one or more base copy services described with the chain of base copy types in the document".

Examiner is not persuaded. Referring to LINDE, column 12, lines 65-67, wherein to perform read/write operations on a source volume or point in time volume, is interpreted and equivalent to "executing the code to perform one or more base copy services described with the chain of base copy types in the document", wherein one or more base copy services is interpreted to be the "point-in-time volume, and column 5, lines 45-53, wherein backup server can then perform the backup process on point in time volume 2 at some later time, yet the backup is as of Monday at 17:00 hours regardless of when the actual backup process is completed and because the point in time process preserves the state of source volume at the particular point in time the relationship was enabled, which is interpreted to be the "point in time sequence", and the application server can continue to read and write the source volume after Monday at 17:00 hours, which is interpreted to be continuous, which is equivalent to "copy services described with the chain of base copy types in the document".

**Prior Art of Record**

(The prior art made of record and not relied upon is considered pertinent to applicant's disclosure)

1. LINDE et al (US Patent No. 6,6,799,258) discloses a method and apparatus for point-in-time volumes are provided.
2. GOIFFON et al (US Patent No. 6,226,792) discloses an object management system is providing for managing, cataloging, and discovering various potentially reusable code and data components that exist within an Information Technology (IT) platform, and which each have well-defined interfaces with other components.

**Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**Point of Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene R. Rose whose telephone number is (571) 272-0749. The examiner can normally be reached on 8:00am - 4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helene R Rose  
Technology Center 2100  
December 29, 2006



ALFORD KINDRED  
PRIMARY EXAMINER